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| APPLICATION NO.                                                                                | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------------------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/517,288                                                                                     | 12/08/2004  | Ernst-Christian Koch | 18452               | 4319             |
| 272                                                                                            | 7590        | 02/07/2006           | EXAMINER            |                  |
| SCULLY, SCOTT, MURPHY & PRESSER<br>400 GARDEN CITY PLAZA<br>SUITE 300<br>GARDEN CITY, NY 11530 |             |                      | PARSLEY, DAVID J    |                  |
|                                                                                                |             |                      | ART UNIT            | PAPER NUMBER     |
|                                                                                                |             |                      | 3643                |                  |

DATE MAILED: 02/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/517,288

Applicant(s)

KOCH ET AL.

Examiner

David J. Parsley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3-21-05</u> .                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## **Detailed Action**

### ***Preliminary Amendment***

1. Entry of applicant's preliminary amendment dated 12-8-04 into the application file is acknowledged.

### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Specification***

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it begins with an implied statement.

Correction is required. See MPEP § 608.01(b).

*Claim Objections*

4. Claim 7 recites the limitation "the disc" in line 2. There is insufficient antecedent basis for this limitation in the claim.

*Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,838,167 to Prahauser et al.

Referring to claim 1, Prahauser et al. discloses a fog projectile having an active charge comprising a pyrotechnic active material – at 15, for producing an aerosol which emits in the infrared and which is visually impenetrable – see figure 1, column 2 lines 50-68 and column 3 lines 1-66, wherein the active charge is a hollow cylinder stack – see at 13 in figure 3 which shows multiple stacked components of the aerosol generating material, the hollow cylinder stack being composed of a plurality of layers of hollow cylindrical segments – see at 13 in figure 3, and in which the hollow cylinder stack is held in an enclosure – at 16,18, which is burnable down – see for example figure 1 and column 4 lines 33-55, and which contains a firing charge – at 22, concurrently acting as a discharge charge – see for example column 4 lines 8-55, and comprises a combustible foil – at 14 – see for example column 3 lines 18-42.

Referring to claim 2, Prahauser et al. discloses the firing charge – at 22, forms the lowermost layer of the stack – see for example figure 3.

Referring to claim 3, Prahauser et al. discloses the enclosure comprises the foil – at 14, and a disc – at 24 of the lowermost member of the stack as seen in figure 3 or at the lower member of the case – at 16, located directly beneath the charge – at 22 as seen in figure 3, which is arranged beneath the stack – see for example figure 3.

Referring to claim 4, Prahauser et al. discloses the foil – at 14 of the enclosure peripherally encloses the active charge – at 15 – see figure 2, where the foil – at 14 encloses the inner layer of the active charge – at 15, and at the top side thereof – see figure 3 where the foil – at 14 of the uppermost member of the stack is located at a top side of the charge.

Referring to claim 8, Prahauser et al. discloses an electrical firing element – at 20,21, projects into the firing charge – at 22 – see at 20 in figure 3 and see column 4 lines 33-66 which describes the operation of the device which is done electrically via computer controls which initiates the detonation of the device via the electrical fuse – at 20,21.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prahauer et al. as applied to claim 1 above.

Referring to claim 5, Prahauer et al. further discloses the foil – at 14 is made of paper – see column 3 lines 19-42. Prahauer et al. does not disclose the paper is saturated with paraffin. However, applicant does not disclose that the paper saturated in paraffin is critical to the operation of the invention in view of other materials comprising the foil. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Prahauer et al. and add the paper foil saturated in paraffin, so as to allow for the device to combust/burn slower during use.

Referring to claim 7, Prahauer et al. further discloses the disc of the enclosure has an opening extending therethrough – see at 24 in figure 4.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prahauer et al. as applied to claim 3 above. Prahauer et al. does not disclose the disc is made of pressed fiber material. However, applicant does not disclose that making the disc out of a pressed fiber material is critical to the operation of the invention in view of other types of materials which could be used for the disc. Therefore, it would have been obvious to one of ordinary skill in the art to take the device of Prahauer et al. and add the disc made of fiber, so as to allow for the disc to be combustible and burn away during use.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prahauer et al. as applied to claim 1 above. Prahauer et al. further discloses the projectile is dimensioned such that the enclosure breaks open – see for example column 4 lines 8-66. Prahauer et al. does not disclose that the enclosure breaks open about 5 to 10 meters along its trajectory. However, as seen in column 4 lines 33-37 of Prahauer et al., the device can be made to break apart at the

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requested height which means the height at which the device is detonated/breaks apart is controllable via the computer described in column 4 lines 56-62. Therefore, since this limitation is a for use limitation/functional language, it is deemed that the device of Prahauer et al. is capable of breaking apart at 5 to 10 meters along its trajectory. Therefore, it would have been obvious to one of ordinary skill in the art to take the device of Prahauer et al. and add the projectile breaking apart at 5 to 10 meters along its trajectory, so as to allow for the device to provide low visibility over an object located near the projectile.

### *Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to smoke producing projectiles in general:

U.S. Pat. No. 3,352,238 to Spragg et al. – shows smoke generating projectile

U.S. Pat. No. 3,861,880 to Thompson – shows gas-generator with fiber disc

U.S. Pat. No. 4,391,197 to Jacobsen et al. – shows gas generating projectile

U.S. Pat. No. 5,272,981 to Badura et al. – shows gas generating projectile

U.S. Pat. No. 5,499,582 to Schiessl et al. – shows gas generating projectile

U.S. Pat. No. 6,612,242 to Raupp et al. – shows gas generating projectile


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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Parsley whose telephone number is (571) 272-6890.

The examiner can normally be reached on Monday-Friday from 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571) 272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
David Parsley  
Patent Examiner  
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